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# Sources of Sex Information Used by Young British Women Who Have Sex with Women (WSW) and Women Who Have Sex Exclusively with Men (WSEM): Evidence from the National Survey of Sexual Attitudes and Lifestyles

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## Abstract

There is little consideration about the provision of information about sex to women who have sex with women (WSW). This study drew on data from the third National Survey of Sexual Attitudes and Lifestyles, a nationally representative survey of people in Great Britain. Logistic regression was undertaken to examine firstly the relationships between WSW and women who have sex exclusively with men (WSEM) and their main source of information about sex, and secondly between WSW/WSEM and unmet need for information about sex. Each source was included as the binary outcome indicating yes as this was the main source, or no as this was not the main source of information about sex. The results found that WSW had significantly lower odds of reporting lessons at schools as their main source of information and significantly higher odds of reporting sources defined as ‘other’ (predominantly first girlfriend/boyfriend or sexual partner) as their main source of information. Reported levels of unmet need for information were also higher among young WSW compared with WSEM. This study provides new insights into the sex educational needs of young women and highlights the need for sex education in schools in Great Britain to include information on a full range of sexual practices, including same-sex sexual relationships.

**Keywords** Women who have sex with women · Sexual health · Sex education · Source of information about sex

Adolescence is a critical period of psychological, biological, and social changes (World Health Organization, 2018), in which individuals first start exploring their sexuality and engaging in sexual behaviour. This makes the provision of accurate and complete information about sex during this life stage important (Bearinger, Sieving, Ferguson, & Sharma, 2007). The literature reveals a diversity of formal and informal sources through which adolescents receive information about sex. These include parents, peers, mass media, school, and health professionals (Bleakley, Hennessy, Fishbein, & Jordon, 2009; Coffelt, 2017; Donaldson, Lindberg, Ellen, & Marcell, 2013; Powell, 2008; Sprecher, Harris, & Meyers, 2008; Stidham-Hall, Moreau, & Trussell, 2012;

Tanton, Jones, Macdowall, Clifton, Mitchell, Datta, & Mercer, 2015; Whitfield, Jomeen, Hayter, & Gardiner, 2013).

In the context of Great Britain, Tanton et al.’s (2015) analysis of nationally representative data reveals that over the past two decades, there have been changes in what young people report as their main source of information about sex. For both young women and men, there has been a marked increase in ‘lessons from school’ forming young peoples’ main source of information. Whereas for men the percentage reporting ‘friends of about own age’ has declined, for women, the percentage reporting ‘mother’ and ‘first sexual partner’ as a main source has declined. Furthermore, recent technological advances and forms of media are opening up new avenues for the provision of information to young people. In 2017, it was estimated that in the United Kingdom (UK), 94% of those aged 8–11 and 99% of those 12–15 years old used the Internet (Ofcom, 2017), theoretically making online information about sex accessible to almost all young people in the country. Indeed, approximately one in four young men and one in seven young women in Great Britain report using the Internet to find out more about sex (Tanton et al., 2015).

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There are questions, however, surrounding whether the current provision of information about sex is meeting young people's needs. The unmet need for sex information is high in Great Britain, with two-thirds of young people reporting that at the time they first felt ready for some sexual experience, they would have liked to have known more about sex (Tanton et al., 2015). Sex education tends to focus on safe sex in terms of heterosexual intercourse (Pound, Langford, & Campbell, 2016), and the focus on young women to make 'responsible choices' is argued to not recognize the importance of pleasure and disempowers young women (Hanbury & Eastham, 2016). Young people have expressed the desire for a more positive approach to sex education that focuses more on psychosexual aspects such as pleasure, relationships, and emotions, as well as information on a wider range of sexual practices (Pound et al., 2016; Tanton et al., 2015).

Whilst there has been some consideration of how sources of information differ by demographic characteristics, such as socio-economic status, ethnicity, and gender (Macdowall et al., 2015; Powell, 2008; Sprecher et al., 2008; Stidham-Hall et al., 2012), there has been little consideration of whether sources of information about sex differ based on sexual orientation, as defined by behaviour. Longitudinal mixed methods research by Kubicek, Beyer, and Weiss (2010) among young men who have sex with men (MSM) in Los Angeles suggest that MSM rely to a greater extent on information from informal sources (such as pornography, their peers, and sexual partners) than men who have sex exclusively with women (MSEW). The reason provided for why informal sources were used was because the focus on education is on heterosexual sex in both school-based sex education and in the information provided by parents. In Great Britain, Section 28 of the 1998 Local Government Act prohibited the teaching in schools of 'homosexuality as an acceptable family form.' Whilst this section was repealed in Scotland in 2000 and the rest of Great Britain in 2003, sex education in schools has also been critiqued by young people themselves as being heteronormative. Young people have also expressed the desire of wanting 'homosexuality to be discussed' (Pound et al., 2016, p. 7).

In comparison to the body of literature on MSM, there is a smaller body of research on women who have sex with women (WSW). Research on WSW includes sexual health service utilization (Agénor, Muzny, Schick, Austin, & Potter, 2017; Mullinax, Schick, Rosenberg, Herbenick, & Reece, 2016), sexual health behaviours and outcomes (McCauley, Silverman, Decker, Agénor, Borrero, Tancredi, Miller, 2015; Mercer, Bailey, Johnson, Erens, Wellings, Fenton, & Copas, 2007; Schick, Rosenberger, Herbenick, & Reece, 2012), and drug and alcohol consumption (Cochran, Ackerman, Mays, & Ross, 2004; Mercer et al., 2007). In comparison, there is relatively

little evidence regarding sex information sources and needs among WSW. This study aims to investigate whether sources of information about sex differ between young WSW and women who have sex exclusively with men (WSEM), and to consider how well these sources of information meet young women's information needs about sex. Research appears to be lacking on WSW, with the majority of studies to date frequently relying on samples from clinics or lesbian venues (Mercer et al., 2007). Aspects of sexuality, such as behaviour and identity, do not always neatly align (Richters, Altman, Badcock, Smith, de Visser, Grulich, Simpson, 2014). Therefore, our study considers WSW regardless of their sexual identity and focuses on sexual behaviour. This study draws on data from young women aged between 16 and 25 years of age in the third National Survey on Sexual Attitudes and Lifestyles (Natsal-3).

## Methods

### Data

Data collection for Natsal-3 occurred between 2010 and 2012. A multi-stage stratified sampling approach was used with postal address files (PAF) being the primary sampling unit. PAFs were stratified by region, population density, proportion of population aged 60 years or above, and proportion of household heads in non-manual occupations (Erens, Phelps, Clifton, Mercer, Tanton, Hussey, Sonnenberg, Macdowall, Field, Datta, Mitchell, Copas, Wellings, & Johnson, 2014). Thirty to 36 addresses were randomly chosen within each PAF, and one eligible individual selected from each household. Those aged 16–34 years were oversampled to ensure sufficient statistical power in analyses in groups that may have greater sexual and reproductive health needs. The cooperation rate for Natsal was 65.8%, with a response rate of 57.7%.

### Measures

#### Definition of Groups

In this paper, WSW were defined as any woman reporting at least one same-sex sexual partner in her lifetime, regardless of the number of opposite-sex partners reported. Same-sex partnership was reported in answer to the question 'Have you had sex with a woman involving genital area/vaginal contact?' WSEM were defined as any woman reporting at least one opposite-sex sexual partner in her lifetime and no same-sex partners. We restricted our focus to women aged 16 to 25 years.

## Learning About Sex

Our first outcome considered the main source of information about sex. The first stage of the Natsal-3 interview was conducted via face-to-face computer-assisted personal interviews (Erens et al., 2014). This part of the survey collected a range of information relating to demographic characteristics, as well as information relating to early-life experiences and learning about sex. We utilized the questions asking ‘When you were growing up, in which of the ways listed on this card did you learn about sexual matters?’ and ‘From which did you learn most?’ to ascertain whether the main sources of information about sex varied between WSW and WSEM. This variable was first coded into the categories ‘lessons at school’, ‘friends of about my own age’, ‘immediate family’ (which combined the outcomes of mother and father [including step or adoptive] and brother and sister [including step, adoptive, or half]), ‘media’, and a category defined as ‘other’. Our media category consisted of the ‘Internet’, ‘books/magazines or newspapers’, ‘television/radio/DVDs/videos’, ‘pornographic Internet’, and ‘pornographic magazines and film’. Sources included in the category we labeled as ‘other’ included ‘doctor, nurse, or clinic’, ‘older friends’, ‘other relative’, and ‘first girlfriend/boyfriend or sexual partner’. It should be noted that of the 173 women in our sample who were coded as having a main source of ‘other’, 114 stated that this was their first partner (which accounted for 66% of this group when weighted). Secondly, a series of binary variables were created to represent whether each category was the main source of information. For example, for the main source of information being lesson/s in school, the possible outcomes of this variable were either ‘yes, this was my main source of information’ or ‘no, this was not my main source of information’.

## Unmet Need for Information About Sex

To ascertain whether there were differences regarding unmet need and a desire for further information, we used the questions asking when participants ‘first felt ready for sexual experience’ about what, if anything, respondents wanted to know more about. Participants were asked if they would have liked to have known more about the following: *other sexual practices, how girls’ bodies develop, STIs, safe sex, sexual intercourse, use of a condom, making sex more satisfying, homosexuality/lesbianism, sexual feelings/emotions/relationships, how boys’ bodies develop, contraception/birth control, how to be able to say ‘no’, masturbation, how a baby is born, and wanted to know more but not sure what about*. If the answer to any one of these questions was yes, they were counted as having an unmet need because they were considered to not have received all the information they would have liked.

## Confounders

Additional covariates included in the adjusted analysis included age at first sex, parental ‘social class’, race, and whether the individual attended a same-sex school. The covariate of age at first sex was used in Powell’s (2008) research with youth aged 12–19 years in Cardiff which found that sources of information about sex differed according to the age at which an individual first felt ready for sex. Those that were older were less likely to use formal sources, such as lessons in school. In this study, age at first sex was used regardless of whether it was same-sex or opposite-sex sex. ‘Social class’ has been found to be related to the provision of information about sex by parents (Sprecher et al., 2008; Stidham-Hall et al., 2012). Parents from ‘lower social classes’ are less likely to be a main source of information. This is a finding Sprecher et al. (2008) attributes to parents’ knowledge and comfort around talking about sex with their children, as well as their increased ability to regulate and influence their children’s sexual behaviour. Parental ‘social class’ was determined using the question which asked ‘What was your mother/father’s job when you were 14?’, with a variable then derived from the answers given placing the parental social class of the participants into social classes I/II/III and IV/V. These social class definitions are taken from the Social Class based on Occupation index. The social class categories are defined as follows: I refers to professional occupations, II refers to managerial and technical occupations, III refers to skilled manual and non-manual occupations, IV refers to partly skilled occupations, and V refers to unskilled occupations. Information was not available for those who did not live with their parents at the age of 14, and these were coded as such. Sprecher et al.’s (2008) study of sources of information about sex among college students in America found race to be important. In this study, we included race which was coded as ‘White’ and ‘non-White’ using the answers to the question ‘to which of the ethnic groups on this card do you consider you belong?’, with available options of white, mixed, Asian or Asian British, black or black British, and Chinese or other ethnic group. Due to small numbers, the variable was recoded into binary format. Lastly, whether the individual attended a same-sex school was included because the current literature suggests that the information provided in, and experience of, sex education in school differs according to the sex composition of the audience. For instance, Pound et al.’s (2016) synthesis of qualitative studies of young people’s perceptions of sex education noted that in particular, boys can be disruptive and cause issues in school-based sex education.

## Statistical Analysis

For the purpose of this paper, the analysis was restricted to women aged under 26 who had ever had a sexual partner, and

for whom complete data for all variables of interest were available ( $n = 1659$  young women). Whilst the Natsal-3 collects data from all participants (aged 16–74 years) on sources of information about sex when growing up, we focused on the youngest age group within the survey to increase the relevance of the findings to young people in Britain today. Descriptive statistics were summarized for the study population and for variables included in our analysis. Logistic regression was undertaken to examine firstly the relationships between WSW/WSEM and their main source of information about sex, and secondly between WSW/WSEM and the unmet need for information. We then restricted our sample to those who answered about each particular source as a main source of information, and used the unmet need variable as the outcome to assess whether unmet need differed between WSW and WSEM depending on which source was listed as the main source of information when learning about sex. Complex survey weights were applied to the data so distributions of key characteristics, including sex and age distributions, were reflective of the population of Great Britain as recorded in the 2011 census. These weights also ensured confidence intervals were accurately estimated with consideration of the study's design. Odds ratios (ORs) and adjusted odds ratios (AORs) are presented with 95% confidence intervals. All statistical analyses were conducted using STATA software version 14 (Stata Corp. Inc., TX, USA).

## Results

Table 1 presents the demographic characteristics of our sample. The participants in our sample consist of 157 (9.5%) women who reported they had ever had sex with a woman involving genital contact, with 93% of WSW reporting they had at least one opposite-sex partner in their lifetime. The mean number of opposite-sex sexual partners reported was significantly higher among WSW compared to WSEM (14.5 vs 6.6;  $p < 0.001$ ). The mean age at sexual debut was approximately 1 year younger among WSW compared to WSEM (15.5 vs 16.4 years old;  $p < 0.001$ ). The number of sources that WSW and WSEM reported that they received information about sex from when they were first ready for sexual experience did not significantly differ. The mean age at interview was 21 for both WSW and WSEM. In terms of sexual orientation, over half of WSW identified as heterosexual or straight, whilst one-third identified as bisexual and 12% as lesbian or gay.

Table 2 presents the characteristics of the sample in terms of their reported main source of information about sex when growing up and whether they felt like they had an unmet need for information when they first felt ready for sexual experience. Differences exist in the reported main source of information between young WSW and WSEM. The most

frequently reported main source of information for WSEM was lessons at school (37.6 vs 23.7% for WSW;  $p < 0.001$ ). For WSW, friends were the most commonly reported source of information, although it must be noted the percentage of WSW and WSEM reporting friends as their main source did not differ significantly. Lessons at school were the second most frequently reported main source of information about sex among WSW. In the adjusted logistic models, WSW had lower odds of reporting lessons at school as their main source of information compared to WSEM (AOR 0.51; CI 0.33–0.79). The odds of WSW reporting 'other source' as their main source of information was 2.14 (95% CI 1.27–3.63) times the odds of WSEM. There were no significant differences in the odds of WSW and WSEM when the outcomes were reporting immediate family, media, or friends of the same age, as the main source of information about sex.

A significantly greater percentage of young WSW (86.7 vs 71.1% for WSEM;  $p < 0.001$ ) reported that they felt they wanted to know more about sex when they first felt ready for sexual experience. In the adjusted logistic model, WSW had increased odds of reporting they wanted to know more about sex compared to WSEM (AOR 2.68; CI 1.60–4.50). In order to investigate what may be influencing this relationship, descriptive statistics were obtained on what topics young women wanted to know more about. Table 3 shows highly significant differences ( $p < 0.001$ ) in terms of WSW wanting to know more about 'other sexual practices' (20.1% for WSW vs 9.1% for WSEM), 'homosexuality/lesbianism' (23.2% for WSW vs 7.5% for WSEM), and 'being able to say no' (33.5% for WSW vs 14.7% for WSEM).

Unmet need for information was also considered by main source of information about sex (Table 2). Caution needs to be taken when interpreting the results, as there were wide confidence intervals, due to small group sizes. The results, nonetheless, do indicate some differences. Among those who cited their immediate family as their main source of information, the odds of WSW wanting to know more information was significantly greater than the odds of WSEM (AOR 5.70; 95% 1.67–19.51). This result was also found when restricting the analysis to those who cited friends about their own age as their main source of information (AOR 2.61; 95% 1.04–6.57).

## Discussion

This paper provides the first consideration of differences between WSW and WSEM in main sources of information about sex and unmet need for information about sex among young women in Great Britain. In our sample, WSW had a significantly younger age of sexual debut and a significantly greater number of reported sexual partners. The consideration of the sex education among WSW is, therefore, important for understanding the sexual health needs of young women.



**Table 1** Demographic characteristics of young WSW and WSEM

	WSW, <i>n</i> (%)	WSEM, <i>n</i> (%)
Sexual identity***		
Heterosexual/straight	96 (57.1)	1480 (98.4)
Gay/lesbian	18 (12.3)	0 (0)
Bisexual	41 (29.6)	18 (1.2)
Other	2 (1.0)	4 (0.4)
Opposite-sex partners***		
Had at least 1 opposite-sex partners in lifetime	145 (92.9)	—
Had at least 1 opposite-sex partner in last 5 years	142 (91.7)	1492 (99.8)
Had at least 1 opposite-sex partner in last year	126 (78.7)	1454 (97.1)
Race		
White	144 (93.3)	1354 (88.5)
Non-white	13 (6.7)	148 (11.5)
Age at first sex <sup>a***</sup>		
Mean (SD)	15.5 (.15)	16.4 (.10)
Age at interview		
Mean (SD)	21.4 (0.2)	21.0 (0.07)
Whether attended a same-sex school		
Attended same-sex school	13 (8.5)	132 (9.7)
Did not attend a same-sex school	144 (91.5)	1370 (90.4)
Parental social class		
Did not live with natural parents	13 (6.6)	50 (2.5)
I/II/III <sup>b</sup>	113 (73.7)	1132 (76.9)
IV/V <sup>b</sup>	31 (19.8)	320 (20.6)
Behaviours <sup>c***</sup>		
Mean number of female sexual partners (SD)	2.9 (5.5)	—
Mean number of male sexual partners (SD)	14.5 (20.6)	6.6 (8.6)
Number of sources of information about sex reported		
1–2 sources	22 (14.0)	297 (19.8)
3+ sources	135 (86.0)	1205 (80.2)
Total ( <i>N</i> )	157	1502

% are weighted according to Natsal weight intended to ensure sample is representative of 2011 census

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

<sup>a</sup> Age at first sex was derived from the following questions ‘How old were you when you first had sexual intercourse with someone from the opposite sex, or hasn’t this happened?’ and ‘Have you had sex with a woman involving genital/vaginal contact? How old were you the first time you had sex with a woman?’ Age at earliest sex was used regardless of whether it was same-sex or opposite-sex sex

<sup>b</sup> These social class definitions are taken from the Social Class based on Occupation index. The social class categories are defined as follows: I refers to professional occupations, II refers to managerial and technical occupations, III refers to skilled manual and non-manual occupations, IV refers to partly skilled occupations, and V refers to unskilled occupations

<sup>c</sup> Sexual partners defined in the Natsal-3 as ‘people who have had sex together’—whether just once, or a few times, or as regular partners, or as married partners

The main source of information about sex among WSEM is lessons at school, which mirrors Tanton et al.’s (2015) analysis of the same data, which focused on women overall. However, in both the descriptive analysis and logistic models, WSW are less likely to report lessons at school as their main source of information about sex, when compared to WSEM. This could be due

to the biased nature of school-based education, which focuses on heterosexual intercourse. Sex education needs to be more inclusive, providing information in a sensitive way about a diversity of relationship forms, and possible means of risk and protection that goes beyond a focus on opposite-sex sexual behaviour. Indeed, the descriptive statistics on unmet need for information reveal that one-fifth

**Table 2** Main source of information about sex when growing up and unmet need for information among young WSW and WSEM

	WSW, <i>n</i> (%) <sup>a</sup>	WSEM, <i>n</i> (%) <sup>a</sup>	Unadjusted OR	Adjusted OR <sup>b</sup>
Sources of information—main source only				
Lessons at school	34 (23.7)	561 (37.6)	0.52 (0.33–0.80)***	0.51 (0.33–0.79)***
Immediate family member	30 (18.0)	259 (16.6)	1.10 (0.70–1.72)	1.02 (0.64–1.63)
Friends about the same age	45 (27.0)	408 (26.6)	1.02 (0.69–1.50)	1.03 (0.70–1.51)
Media (Internet/films/books)	19 (12.7)	130 (9.5)	1.39 (0.80–2.41)	1.50 (0.86–2.61)
Other source	29 (18.7)	144 (9.7)	2.13 (1.28–3.54)**	2.14 (1.27–3.63)**
Wanted to know more				
Felt wanted to know more about sex	135 (86.7)	1079 (71.1)	2.64 (1.58–4.43)***	2.68 (1.60–4.50)***
Felt wanted to know more according to main source of information				
Wanted to know more—main source lessons at school	28 (79.0)	365 (63.3)	2.18 (0.80–5.93)	2.23 (0.83–6.03)
Wanted to know more—main source learning from immediate family member	27 (91.8)	175 (68.0)	5.26 (1.51–18.33)**	5.70 (1.67–19.51)**
—Wanted to know more—main source learning from friends about the same age	39 (89.0)	317 (76.2)	2.52 (0.96–6.60)	2.61 (1.04–6.57)*
Wanted to know more—main source from media (Internet/books/films)	15 (82.1)	106 (84.1)	0.87 (0.25–3.05)	0.97 (0.27–3.45)
Wanted to know more—main source other	26 (91.3)	116 (79.8)	2.66 (0.65–10.87)	2.89 (0.70–11.95)

<sup>a</sup> % are weighted according to Natsal weight intended to ensure sample is representative of 2011 census

<sup>b</sup> Adjusted for age at first sex, ethnic group, whether attended a same-sex school, and parental social class

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

of WSW wanted to know more about ‘homosexuality’ and other sexual practices’.

In the descriptive analysis and logistic models, WSW were more likely to report ‘other sources’ as their main source of information. As described in the ‘Methods’ section in our sample, learning about sex from first girlfriend/boyfriend or

sexual partner accounted for the majority of responses in the ‘other source’ category. In Kubicek et al.’s (2010) study of young MSM learning from sexual partners was noted as one informal source used to fill information needs not met by formal sex education in school. In these circumstances, it was noted that these sexual partners tended to be older. This

**Table 3** Topics concerning sex which WSW and WSEM wanted to know more about when they first felt ready for sex

Topic wanted to know more information on	WSW, <i>n</i> (%) <sup>a</sup>	WSEM, <i>n</i> (%) <sup>a</sup>	<i>p</i> value
Being able to say no	52 (33.5)	237 (14.7)	< 0.001
Contraception/birth control	49 (33.0)	444 (28.2)	0.67
Homosexuality/lesbianism	33 (23.2)	119 (7.5)	< 0.001
How a baby is born	22 (14.8)	125 (7.9)	0.02
How boys’ bodies develop	18 (12.0)	103 (6.6)	0.04
How girls’ bodies develop	21 (13.9)	148 (9.7)	0.17
Making sex more satisfying	37 (24.1)	234 (15.6)	0.01
Masturbation	24 (15.5)	118 (7.9)	0.002
Other sexual practices	31 (20.1)	140 (9.1)	< 0.001
Safer sex	34 (21.5)	278 (17.7)	0.34
Sexual feelings/emotions/relationships	64 (39.7)	473 (30.2)	0.02
Sexual intercourse	32 (22.5)	214 (14.3)	0.04
STIs	57 (34.8)	473 (30.4)	0.22
Using a condom	40 (24.4)	236 (15.2)	0.002
Not sure what	4 (3.4)	4 (0.9)	0.05
All of the above	16 (11.0)	57 (3.7)	< 0.001

Groups are not mutually exclusive. An individual can answer yes if they have an unmet need to any of the above questions

<sup>a</sup> % weighted to correspond to population distribution for GB according to 2011 census



information was not available in the Natsal-3 to investigate whether this applied to our group of WSW.

Our results suggest levels of unmet need for information about sex is higher among young WSW compared to WSEM. In addition to a greater percentage of WSW reporting wanting to know about ‘other sexual practices’ and ‘homosexuality/lesbianism’ compared to WSEM, this group were also more likely to report wanting to know more about ‘being able to say no’ which given the number of WSW who also had male partners may relate to opposite-sex interactions. Whilst sex education has focused on giving young women information about negotiating safe sex in heterosexual intercourse (Hanbury & Eastham, 2016), there is also the need for focus on the negotiation of unwanted sexual advances. Ingham (2005) argues that sexuality education focusing on a wider range of sexual practices (and not just heterosexual intercourse) and inclusion of discussion on values, desire, pleasure, and respect will increase young women’s negotiation abilities through making them feel more comfortable in their own bodies. Fifteen percent of WSEM also reported wanting to know about ‘being able to say no’ indicating this is not a shortcoming of sexuality education related to a specific group of young women.

Interestingly, when stratified by reported main source of information about sex, WSW are only more likely to report they would have liked to know more about sex when the main source was friends of their own age and their immediate family. In terms of the family, a number of studies have documented difficulties in communication about sex and relationships between parents and children (for example, Coffelt, 2017; Hyde, Carney, Drennan, Butler, Lohan, & Howlett, 2010). Where parents are heterosexual, heteronormativity is likely to be a key feature of conversations (Kubicek et al., 2010; Martin, 2009). Likewise, Kubicek et al. (2010) qualitative interviews with young MSM revealed that whilst peers were an important source of information about sex, during adolescence, this mostly focused on heterosexual sex. This therefore could act as an additional barrier for young people wishing to know about same-sex sexual relationships, because their peers may be unwilling and/or unable to discuss this.

The main strength of this paper is its reliance on national probability data, which could be considered representative of WSW in Great Britain, and therefore presents a more accurate picture of their sex education needs. Most previous studies on same-sex sexual partnerships have used convenience-based samples that have relied on sampling from lesbian venues (or community events) or clinics, which will not be representative of the WSW population (Mercer et al., 2007). In our sample, over half of WSW identify as heterosexual/straight and a higher percentage reported a sexual history with men when compared to other UK/GB studies using convenience-based sampling (Bailey, Farquhar, Owen, & Whittaker, 2003;

Bailey, Farquhar, Owen, & Mangtani, 2004; Bailey, Benato, Owen, & Kavanagh, 2008).

There were several caveats to this study. First, the Natsal-3 is a cross-sectional study in the form of a questionnaire and is subject to recall and social desirability bias. Second, data collection for the Natsal-3 occurred between 2010 and 2012. Given that internet use has continued to be important to young people from 2012 to the present day, there may be recent changes in terms of the sources of information that young people use to learn about sex (Tanton et al., 2015). It is important, however, to note that although use of the Internet is near ubiquitous, the Internet may not be used frequently by young people for seeking out health-related information. For example, research reveals that whilst the majority of young people use the Internet on a daily basis, only a minority (15%) used the Internet to access health-related information (including information about sex) (Utter, Lucassen, Denny, Fleming, Peiris-John, & Clark, 2017). Third, the wording of the Natsal-3 could have resulted in bias due to terminology used, for example terms such as sexual intercourse could be interpreted by respondents as only being penetrative sex. Furthermore, reference is made in the survey to wanting to know more about ‘homosexuality/lesbianism’ but not bisexuality, and questions relating to the sexual experiences of transgender people are also missing. Lastly, whilst the Natsal-3 collects data on sexual identity, small group sizes make comparison between women who have sex exclusively with women and those who have sex with men and women difficult. An indication of whether the same outcomes are found among different categories of WSW would have aided in providing a fuller picture of the unmet need. Despite these limitations, the Natsal-3 is currently the best available national data source for examining sources of information about sex among young people. Future research into whether the information provided was not felt to be adequate due to quality and subject matter, or due to not enough information being provided is recommended. Furthermore, the majority of women included in the study identified as white, meaning the results will reflect the needs of a largely white population. Whilst distributions for race are comparable with those for the UK as a whole, further information on unmet need for WSW of different ethnicities and races would be important. Small numbers prevented that from being explored in this paper.

## Conclusion

To date, sexual minority health research and promotion has focused on MSM, due to the risk of HIV which is related to penile-anal sex (Schick et al., 2012). Prior research has nonetheless revealed that WSW are more likely to have compromised sexual health outcomes (including earlier sexual debut and increased likelihood of abortion and being diagnosed with

STIs (McCauley et al., 2015; Mercer et al., 2007). Previous research has linked sources of information about sex during adolescence/young adulthood to later-life sexual health and wellbeing (Maddowall et al., 2015). It is therefore important to know about the main sources of information about sex of young WSW and whether they have an unmet need for information. To the best of our knowledge, this paper is the first consideration of this topic and it outlined a significant gap in current sexuality education in Great Britain particularly around the inadequate provision of sex lessons in school.

Information on the sexual practices between women at any point in the life course is also lacking in Great Britain (Schick et al., 2012). It seems that much remains unknown about the sexual health of WSW, as well as their perception of knowledge and risk. Future research needs to focus on capturing data on same-sex sexual practices between women, the measures they take to protect themselves, and their perception of risk. Such information is needed in order to develop effective public health messages that have traditionally neglected this group (Schick et al., 2012). The inclusion of such questions in a probability sample, such as Natsal, is recommended.

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## Compliance with Ethical Standards

For this type of study, formal consent is not required. This article does not contain any studies with human participants performed by any of the authors.

**Conflict of Interest** The authors declare that they have no conflict of interest.

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